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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/846,146	04/30/2001	Jay A. Kuhn	0325.00452	6032

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EXAMINER	
PERILLA, JASON M	

ART UNIT	PAPER NUMBER
2634	

DATE MAILED: 12/28/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/846,146	KUHN, JAY A.	
	Examiner	Art Unit	
	Jason M Perilla	2634	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *26 August 2004*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-20* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☒ Claim(s) *14 and 20* is/are allowed.

6)☒ Claim(s) *15 and 18* is/are rejected.

7)☒ Claim(s) *1-13,16,17 and 19* is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *30 April 2001* is/are: a)☐ accepted or b)☒ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

1. Claims 1-20 are pending in the instant application.

Drawings

2. The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the in figure 3, the feedback of the output signal must be shown as an input to the first circuit or the feature(s) describing the minimization of the skew between the selected input signal and the feedback of the output signal canceled from the claim(s). No new matter should be entered.

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. The replacement sheet(s) should be labeled "Replacement Sheet" in the page header (as per 37 CFR 1.84(c)) so as not to obstruct any portion of the drawing figures. If the changes are not accepted by the examiner, the applicant will

be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Claim Objections

3. Claims 1-13, 18, and 19 are objected to because of the following informalities:

Regarding claim 1, in line 2, "select one" should be replaced by –select a one--, and, in line 7, "said plurality of" should be replaced by –said one or more--.

Regarding claim 2, the claim is objected to because the delay circuit does not delay the output signal as claimed. Figure 3 of the specification illustrates the delay block as reference 138 and the output signal as "FOUT". As clearly shown in figure 3, the output signal "FOUT" is not input to the delay block 138 and is not configured to delay the output signal as claimed.

Regarding claim 3, the objection as applied to claim 2 above applies to the claim. The output signal is not delayed by the delay circuit as claimed.

Regarding claim 7, in line 2, "said first circuit comprises" should be replaced by –said first circuit further comprises--.

Regarding claim 11, according to figure 3, the first circuit (102) comprises a multiplexer circuit (132) as claimed. However, the multiplexer circuit does not receive the one or more control signals (114a-114n) as claimed. Rather, the multiplexer receives the one or more input signal (110a-110n). In line 10, "clock signal" should be replaced by –clock signals--.

Regarding claim 13, the output signal (fig. 3, ref. 142; "FOUT") is not hardwired to the first circuit as claimed.

Regarding claim 18, the claim is objected to because the first signal does not take as input the feedback of the output signal as claimed according to the drawing figure 3.

Regarding claim 19, the claim is objected to because the delay circuit does not delay the output signal as claimed. Figure 3 of the specification illustrates the delay block as reference 138 and the output signal as "FOUT". As clearly shown in figure 3, the output signal "FOUT" is not input to the delay block 138 and is not configured to delay the output signal as claimed.

Appropriate correction is required.

Claim Rejections - 35 USC § 112

4. The following is a quotation of the second paragraph of 35 U.S.C. 112:

> The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

5. Claim 13 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Regarding claim 13, the use of the limitation including signals being "hardwired" is indefinite because a particular interpretation of the claim may not be made. The one of the input signals is the selected input signal. It is unclear to one having ordinary skill in the art how the selected input signal is to be distinguished from the remaining input signals by being hardwired to the first circuit. The term "hardwired" seemingly adds no additional limitation as broadly as claimed because it is assumed that every input signal is hardwired to the first circuit, and it leads to indefinite interpretations of the claims

because the exact meaning of a hardwired input is not known. Further, the output signal (fig. 3, ref. 142; "FOUT") is not hardwired to the first circuit as claimed which further leads to the claim being indefinite.

Claim Rejections - 35 USC § 102

6. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

7. Claims 15 is rejected under 35 U.S.C. 102(b) as being anticipated by Yeung et al (US 5889436; hereafter "Yeung" – previously cited).

Regarding claim 15, Yeung discloses by figure 7 a method for correcting skew or phase offset between an input signal and a feedback of an output signal, comprising the steps of: (A) receiving a plurality of input signals (outputs of 69-71); (B) selecting by multiplexer (80) one of said plurality of input signals (output of 80); generating a skew signal (output of phase detector 20) in response to said selected input signal and a feedback of said output signal (fout); and adjusting a delay between said selected input signal and said feedback of said output signal, in response to said skew signal. The phase detector (20) takes as input the selected input signal output from the multiplexer (80) passed through the divider (40) as one input and the feedback from the output signal (fout) as a second input as shown in figure 7. The delay or phase shift between the selected input signal and the feedback of the output is adjusted in response to the

skew signal which is the output of the phase detector because the phase detector, loop filter (79) and VCO are designed to remove any delay or phase shift between the inputs.

8. Claim 18 is rejected under 35 U.S.C. 102(b) as being anticipated by Li et al (US 6208183; hereafter "Li").

Regarding claim 18, Li discloses an apparatus by figure 3 comprising: a first circuit (210 and 208) configured to select one of a plurality of input signals (CLK_{REF} or CLK_{D2} via multiplexer 216) and (ii) generate (a) an output signal (CLK_{OUT}) having a frequency (inherent) in response to a skew signal (V_{LF}) and (b) one or more control signals (CLK^*_{OUT}); and a second circuit (202, 204, and 206) configured to generate said skew signal (V_{LF}) in response to said one or more control signals (output of 208; CLK^*_{OUT}), wherein said first circuit is configured to minimize skew between said selected input signal and a feedback of said output signal (input to 208) in response to said skew signal. The first circuit is configure to minimize the difference between the input signal and the feedback of the output signal which is input to the frequency divider (208) to create the skew signal by the second circuit because the skew signal which is generated according to the feedback signal which becomes the control signal acts to remove any difference between the input signal and the feedback signal by the intermediate skew signal.

Allowable Subject Matter

9. The indication of allowable subject matter is made with respect to claims 1-6, 8-14, 19, and 20.

10. Claims 7, 16 and 17 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Conclusion

11. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jason M Perilla whose telephone number is (571) 272-3055. The examiner can normally be reached on M-F 8-5 EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Stephen Chin can be reached on (571) 272-3056. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Jason M. Perilla
December 20, 2004

jmp

CHIEH M. FAN
PRIMARY EXAMINER